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| APPLICATION N | Ю. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|--------|--------------|-----------------------------|-------------------------|------------------|--|
| 09/936,632 | • | 02/21/2002 | Slemen Roelof Van Der Heide | 30394-1057 | 7250 | |
| 5179 | 7590 | 10/04/2002 | | | | |
| PEACO | CK MYE | RS AND ADAMS | EXAMINER | | | |
| P O BOX 26927 ALBUQUERQUE, NM 871256927 | | | | JACKSON, ANDRE K | | |
| | | | | ART UNIT | PAPER NUMBER | |
| | | | | 2856 | | |
| | | | | DATE MAILED: 10/04/2002 | ! | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | , |
|--|--|---|---|---|
| • | | Application No. | Applicant(s) | 7 |
| 1 | | 09/936,632 | HEIDE ET AL. | |
| | Office Acti n Summary | Examiner | Art Unit | |
| • | | Andre' K. Jackson | 2856 | |
| Period fo | - The MAILING DATE of this communication ap r Reply | pears on the cover sheet with th | e c rrespondence address | |
| THE N - Exten after S - If the - If NO - Failun - Any re | DRTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a rep period for reply is specified above, the maximum statutory period e to reply within the set or extended period for reply will, by statute sply received by the Office later than three months after the mailin d patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS fr e, cause the application to become ABANDO | e timely filed days will be considered timely. rom the mailing date of this communication. NED (35 U.S.C. § 133) | |
| 1) | Responsive to communication(s) filed on | | | |
| 2a)□ | | nis action is non-final. | | |
| 3) | Since this application is in condition for allow closed in accordance with the practice under | ance except for formal matters, | | |
| - | on of Claims | | | |
| | Claim(s) <u>1-6</u> is/are pending in the application. | | | |
| | la) Of the above claim(s) is/are withdra | wn from consideration. | | |
| · | Claim(s) is/are allowed. | | | |
| • | Claim(s) <u>1-6</u> is/are rejected. | | | |
| | Claim(s) is/are objected to. | | | |
| | Claim(s) are subject to restriction and/o on Papers | or election requirement. | | |
| · · · _ | he specification is objected to by the Examine | er. | | |
| · | he drawing(s) filed on is/are: a) ☐ acce | | xaminer. | |
| ,— | Applicant may not request that any objection to th | | | |
| 11)[T | he proposed drawing correction filed on | _ is: a)☐ approved b)☐ disapp | proved by the Examiner. | |
| | If approved, corrected drawings are required in re | ply to this Office action. | | |
| 12)∐ T | he oath or declaration is objected to by the Ex | caminer. | | |
| Priority u | nder 35 U.S.C. §§ 119 and 120 | | | |
| 13) 🖂 🗸 | Acknowledgment is made of a claim for foreigi | n priority under 35 U.S.C. § 119 | 9(a)-(d) or (f). | |
| a)[∑ | ☑ All b) ☐ Some * c) ☐ None of: | | | |
| | 1. Certified copies of the priority document | s have been received. | | |
| : | 2. Certified copies of the priority document | s have been received in Applica | ation No | |
| | 3. Copies of the certified copies of the prio application from the International Buse the attached detailed Office action for a list | reau (PCT Rule 17.2(a)). | • | |
| | cknowledgment is made of a claim for domesti | • | | |
| a) | ☐ The translation of the foreign language procknowledgment is made of a claim for domest | ovisional application has been r | eceived. | |
| Attachment(| | | | |
| 2) 🔲 Notice | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) _ | 5) Notice of Informa | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) | |

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DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35
 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application
 No. 09/936632, filed on 2/21/02.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "6" has been used to designate both feed device and battery supply on page 4, lines 2 and 5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in

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upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
 - 4. The disclosure is objected to because of the following informalities:

On page 2, lines 19 and 21; page 3 lines 26,31 and 37; page 4, line

35 "fibre" should be changed to --fiber--.

Appropriate correction is required.

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5. Claim 1 is objected to because of the following informalities:

Claim 1, line 3, "date" should be changed to --data--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 1 recites an internal inspection of the measuring head.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35
U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by
 Moreau et al.

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Regarding claim 1, Moreau et al. discloses a "Multi-element ultrasonic probe for electronic scanning" which discloses a cable (10), a measuring head (4), a device to process measuring data (20) and a reel (15) for winding the cable on and off.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moreau et al. in view of Marvin et al.

Regarding claim 2, Moreau et al. does not disclose a cable that is a glass fiber and a feed device for feeding the measuring head. However, Marvin et al. discloses a "Furnace tube inspection apparatus" which discloses a cable that is a glass fiber (Column 6, lines 49-55) and a feed device for feeding the measuring head (Column 6, lines 3-5). Therefore, it would have been obvious to modify Moreau et al. to include a cable that is a glass fiber and a feed device for feeding the measuring head as taught by Marvin et al. since using optical fiber makes the apparatus lighter and the feed device is needed to provide energy to the measuring head.

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12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moreau et al. in view of Zollingger et al.

Regarding claim 3, Moreau et al. discloses where the measuring head, the feed device and other electronics are incorporated individually in carrier members (Figure 10). What is not disclosed is a reel incorporated in a carrier member. However, Zollingger et al. discloses an "Apparatus for inspecting piping" which has a reel (spool, 38) incorporated in a carrier member. Therefore, it would have been obvious to the skilled artisan to modify Moreau et al. to include a reel incorporated in a carrier member as taught by Zollingger since it would make the invention more compact.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moreau et al. in view of Zollingger et al. as applied to claim 3 above, and further in view of Marvin et al.

Regarding claim 4, Moreau et al. does not explicitly state that the couplings are flexible. However, it is inherent that the couplings be made to be flexible in order to move through curve pipes. Moreau et al. does not explicitly state that the couplings are flexible. Marvin et al. discloses where the individual carrier members are sequentially interconnected by flexible couplings (24,26,28,30 and 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify

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Moreau et al. to include where the individual carrier members are sequentially interconnected by flexible couplings as taught by Marvin et al. since couplings need to be made to be flexible in order to move through curve pipes.

14. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moreau et al. in view of Zollingger et al. and Marvin et al. as applied to claim 4 above, and further in view of Wernicke.

Regarding claim 5, Moreau et al. does not disclose where the flexible couplings are formed by hydraulic tubes with a steel covering. However, Wernicke discloses a "Spiral tractor apparatus and method" which has flexible couplings formed by hydraulic tubes with a steel covering. Therefore, it would have been obvious to one of ordinary skill in the art to modify Moreau et al. to include flexible couplings formed by hydraulic tubes with a steel covering as taught by Wernicke since steel provides a durable structure.

Regarding claim 6, it is inherent that the length of the tubes are chosen because of its flexural stiffness in order to proceed through the pipes without getting stuck and the ability to move through the pipes with ease.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' K. Jackson whose telephone number is (703) 305-1522. The examiner can normally be reached on Mon.-Fri. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are N/A for regular communications and N/A for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

A.J. (/_ // // // // // // // September 26, 2002

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800